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DATE MAILED: 06/17/2004

APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/042,807 01/09/2002		01/09/2002	Oliver J. Gross	4858-000337	5050	
33204	7590	06/17/2004		EXAMINER		
VALENCE 301 CONES		IOLOGY, INC.	MERCADO, JULIAN A			
HENDERSON, NV 89015				ART UNIT	PAPER NUMBER	
				1745		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Applicat	on No.	Applicant(s)					
	10/042,8	07	GROSS, OLIVER	J.				
Office Action Summary	Examine	r	Art Unit					
	Julian M		1745					
The MAILING DATE of this commun	nication appears on th	e cover sheet with the o	correspondence ad	dress				
A SHORTENED STATUTORY PERIOD F THE MAILING DATE OF THIS COMMUN  - Extensions of time may be available under the provisions after SIX (6) MONTMS from the mailing date of this com - If the period for reply specified above is less than thirty (3 - If NO period for reply is specified above, the maximum - Failure to reply within the set or extended period for reply Any reply received by the Office later than three months: - earned patent term adjustment. See 37 CFR 1.704(b).	IICATION. s of 37 CFR 1.136(a). In no evenunication. 30) days, a reply within the state tutory period will apply and very will, by statute, cause the ap	rent, however, may a reply be tir lutory minimum of thirty (30) day ill expire SIX (6) MONTHS from blication to become ABANDONE	nely filed  rs will be considered timel the mailing date of this c ED (35 U.S.C. § 133).	y. ommunication.				
Status								
1) Responsive to communication(s) file	ed on							
2a) ☐ This action is <b>FINAL</b> .	<i>,</i>							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
closed in accordance with the pract	ice under Ex parte Q	uayle, 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims								
4) Claim(s) 1-30 is/are pending in the	application.							
4a) Of the above claim(s) is/a	are withdrawn from co	nsideration.						
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-30</u> is/are rejected.								
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restrict	ction and/or election	equirement.						
Application Papers								
9) ☐ The specification is objected to by th	e Examiner.							
10) The drawing(s) filed on is/are	: a)☐ accepted or b	objected to by the	Examiner.					
Applicant may not request that any obje		-						
Replacement drawing sheet(s) including	•		-					
11)☐ The oath or declaration is objected to	o by the Examiner. N	ote the attached Office	Action or form Pi	.O-152.				
Priority under 35 U.S.C. § 119								
12) ☐ Acknowledgment is made of a claim	for foreign priority ur	der 35 U.S.C. § 119(a)	)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:								
1. Certified copies of the priority								
2. Certified copies of the priority		• •		•				
3. Copies of the certified copies			ed in this National	Stage				
application from the Internation  * See the attached detailed Office action	•	. ,,	ad .					
oce the addition detailed office and	77 701 d 1101 01 1110 0011	mod dopido not rodore						
Attachment(s)								
1) Notice of References Cited (PTO-892)	270.040	4) Interview Summary Paper No(s)/Mail Da						
2) Notice of Draftsperson's Patent Drawing Review (F 3) Information Disclosure Statement(s) (PTO-1449 or			ate Patent Application (PTC	)-152)				
Paper No(s)/Mail Date <u>4-18-02</u> .	,	6) Other:						
J.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)	Office Action Summa	ıry Pa	nt of Paper No./Mail Da	ate 20040612				

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#### DETAILED ACTION

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-9, 12-14, 16-19, 21, 23, 24, 26-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by King (U.S. Pat. 3,972,734).

Regarding claims 1, 2, 4-9, 12-14, 16-19, 21, 23, 24, 26-28 and 30, King teaches a battery sealed with a packaging material such as "very light gauge (0.005 inch thick) sheet nickel" which is folded so that an edge seal [11] is formed, i.e. "[s]ection or extension [12] is of size and shape adapted to fit within an envelope formed by folding section 10 onto section 11". col. 5 line 1-15 The packaging material thickness equals 1.27 mm. As shown in Figure 7, the fold is coiled in the configuration of a G-shape and is intermediate of the top and bottom surfaces of the casing. By "G-shape" (which also reads on the claimed "coiled shape" in claim 14), this feature is given its broadest reasonable interpretation of the edge extending from the centerline of the cell and folded approximately 90 degrees in a counterclockise (CCW) direction four times. A J-shape of the edge naturally resides in a G-shape to the extent that a J-shape has two CCW folds. Terminal leads [58] and [60] provide power to an external load. (col. 7 line 66 et seq.)

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Claims 1-4, 8-11, 14 and 23-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Braem (U.S. Pat. 3,615,861).

Regarding claims 1-4, 8-11, 14 and 23-30, Braem teaches a battery sealed with a packaging material folded so that an edge seal [5] is formed. (col. 2 line 35-37) As in the preceding discussion of King above, by the claimed "G-shape" (which also reads on the claimed "coiled shape" in claim 14) this feature is given its broadest reasonable interpretation of the edge extending from the centerline of the cell and folded approximately 90 degrees in a counterclockise (CCW) direction four times, such as shown in Figure 2 (more easily viewed when Figure 2 is initially rotated 90° CW):



A J-shape of the edge naturally resides in a G-shape to the extent that a J-shape has two CCW folds, such as shown in the portion of Figure 1:



A Z-shape is derived from Figure 1(more easily viewed when Figure 1 is initially rotated 90° CW):



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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata et al. (U.S. Pat. 6,358,644 B1) in view of King as applied to claims 1, 2, 4-9, 12-14, 16-19, 21, 23, 24, 26-28 and 30

Shibata et al. is relied upon to teach a lithium ion battery. While Shibata et al. does not explicitly teach the claimed edge seal, it would be obvious to one of ordinary skill in the art to employ an edge seal in accordance with King's teachings as relied upon above. The motivation for such a modification would be to employ a compact and rigid cell structure while also minimizing bulk. (see King, col. 1 line 36-40, col. 5 line 61-63, col. 7 line 43-45).

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. 6,482,544 B1 to Shiota et al. is cited of cumulative relevance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patrick Ryan Supervisory Patent Examiner Technology Center 1700

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